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COMMUNICATIONS.

EXTERNAL PERINEAL URETHROTOMY, IN EXTREME STRICTURE WITH FISTULA.

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Being called in consultation with Drs. Boland and Renouff in a case of stricture of the urethra in the person of a gentleman about 53 years of age, who had been accustomed to the free use of whiskey, while doing active service on horseback for a number of years, examination revealed the following condition:

Only a fine filiform bougie could be passed partially through a close stricture one inch from the meatus and further exploration internally was impracticable. At several points in the penile portion of the urethra, and also behind the scrotum, indurations of considerable extent were detected by external manipulation, leading to the inference that similar close strictures existed in the course of the urethral canal. But palpation over the membranous urethra in the perineum led to the conclusion that the communication from this point into the bladder was unobstructed. A fistulous opening in the anterior upper part of the scrotum, on the left side of the raphe, gave exit to pus on pressure, and had previously discharged a small quantity of urine, but not continuously. The patient stated that he had only been able to pass his water when under the influence of the alcoholic stimulant, and even then it trickled away slowly and with great difficulty. Under such circumstances I advised, for the relief of the bladder, that external urethrotomy should be resorted to; and at the request of his attendants and with the consent of the patient, this operation was undertaken April 22, 1889, with the assistance of my colleagues.

The patient, on his own responsibility, took free libations of whiskey during the

morning so that no further preparation in this line was requisite. The usual preliminary hypodermic of morphia (gr. ¼ with atropia gr. $\frac{1}{150}$) was administered by Dr. Renouff and the A. C. E. mixture—which is my favorite anæsthetic—was given by Dr. Boland. Two other assistants were placed in charge of the limbs, with the buttocks at the end of the operating table. The perineum was shaved, and washed with a solution of the bichloride of mercury, this being limited to external use by me. The border of induration in the tissues of the canal was now located by my finger and an incision was made backward from this, along the raphe of the perineum, more than an inch in length, and carried inward until it reached a point where from the anatomical relations the urethra should be found. But after careful palpation and inspection I was unable to determine upon the urethral structure, and resolved the doubt by making an effort to accomplish what had seemed at the outset entirely impracticable, to pass a guide down to the membranous urethra from the meatus, notwithstanding the failure to introduce a filiform bougie. A probe being introduced, I passed the narrow blade of a tenotomy knife along the side of it and cut the obstruction of the urethra at the depth of an inch and a half from the meatus. A small sized director was then passed in as a guide for the knife in the complete division of this stricture, after which the smallest olive pointed sound was carried down to another stricture about two and a half inches further, but could not be forced through it. A small gutta percha bougie was also tried without effect, when it occurred to Dr. Boland to force a passage with the gradually tapering point of a Ford's slender divulsor. With the penis well stretched by Dr. Renouff, and guiding this well in the line of the urethra, it was pressed steadily and firmly forward, through the indurated constriction until I felt the point impinging upon the wall of the urethra, which was in contact with the end of my index finger, at the bottom of the perineal incision. All the vexation of locating the urethral canal was now satisfactorily ended; but it was only after several thrusts with a keen sharp-pointed bistoury that I succeeded in penetrating the urethra, stretched over the end of the instrument by tilting it outward in the wound. A director was passed through this small opening in the direction of the penile urethra, and with a probe-pointed bistoury carried along its groove a fine incision was made through the wall of the canal. It was now found that urine escaped from the bladder and a larger catheter was carried without difficulty into its cavity from the wound. There was considerable bleeding in the progress of the dissection through the perineal structure, but sponging with a hot 5 per cent. solution of carbolic acid kept it checked, and there was no vessel which required ligation. The sides of the wound were held back by retractors after the incision reached a depth to require them, and the only embarrassment in the progress of the operation was that which has always been encountered when a sound could not be introduced through the urethra as a guide to its location, and its walls are not indurated in the part which is sought for incision. My division of the superimposed tissues was carried with mathematical precision down to the site of the canal, and yet I was unable to determine with certainty the urethral stricture either by the touch or by sight, from which dilemma I was fortunately able to extricate myself by a recourse to means suited to the emergency, which defined the exact outline of the canal, for my incision.

Before undertaking this perineal section it would therefore be advisable to exhaust our resources for passing a sound down to the site of the proposed urethrotomy, to serve as a guide. The upper or anterior angle of the incision was closed by two cutaneous stitches while a lateral drop stitch through each side of the urethral wall passed out through the skin on its respective side. The sides of the patulous part of the wound were dusted with iodoform, with a little cotton interposed, and a pledget of cotton was held in place by a bandage. Before removing the divulsor it was screwed up to a point of distension equal to the capacity of the meatus, and consequently the dilatation of every portion of the urethra was accomplished.

It will naturally occur to a critical colleague that, in view of the practicability of securing this result, it would not be warrantable to resort to external urethrotomy. But when the fact is recalled of the failure to pass a filiform bougie through the strictures, after long continued efforts, and that consequently division with Maisonneuve's instrument was ruled out, while as a *dernier ressort*, I used the tenotomy knife for the division of the first almost impermeable stricture,

and afterward in sheer desperation I urged the forcible dilatation of the deeper close strictures, all must be convinced of the propriety of undertaking external urethrotomy as a primary operation. Even after securing an outlet for the urine through the penile urethra by these extraordinary proceedings, it will be allowed by those who have had experience in the subsequent management of cases of this class that it is of the utmost importance to relieve the canal for the time from contact of the urine with its incised and lacerated surface. This is effectually done by the free discharges from the perineal opening which was kept patent by the stitch through either side of the incised urethra carried out through the skin, so as to prevent immediate union of the edges by adhesive inflammation.

On the following day the patient was found with a temperature of 100° and pulse 85 beats to the minute, but comparatively comfortable, having slept better than usual, and not having any nausea or vomiting from the long continued use of the anæsthetic. This speaks well for the A. C. E. mixture, and, as a rule, I have observed less trouble in this respect than after chloroform or sulphuric ether uncombined. It is notable, likewise, that the patient had less inclination to take whiskey than previously, and only used it, as prescribed, in limited quantity, during the day. The dressings and bedding under the patient were saturated with urine, which had been discharged without his volition, owing, doubtless, to the impairment of the sphincters of the bladder. Everything was removed which had become soiled, the wound was washed out with a 5 per cent. carbolic solution, and the iodoform with cotton removed, with the understanding that this should be repeated as often as the dressings became saturated with urine.

On April 24, 1889, the patient had passed a good night. Having taken a laxative, which led to an evacuation early in the day, he arose to occupy the stool, and the urine, which had accumulated in his bladder discharged freely, passing out in a bold stream, through the meatus as well as at the perineal opening. This caused considerable smarting and pain, and the flow was accompanied with some blood from the incision of the stricture in the penile urethra. This was followed by a protracted rigor, which passed off with profuse sweating, and his temperature went up to 101° and his pulse to 110 beats to the minute. A hypodermic of morphine gr. ¼ and atropia gr. $\frac{1}{150}$ with the internal administration of two ounces of whiskey, by his attending physicians, met the indications at the outset; and I subsequently suggested ten-grain doses of sulphate of quinine every three or four hours during the day. It was further advised that the stitches be removed; and that the patient should place his finger over the urethra behind the scrotum when he had a prompting to pass his water, so as to prevent its entrance into the penile urethra, and thus lead to its discharge through the artificial opening. The constitutional disturbance was attributed to the unexpected and undesirable passage of the urine through the canal, and only confirmed my apprehensions of such a result expressed in my notes of the operation on the first day.

He now had no craving for the alcoholic stimulant, as he did while suffering with retention caused by the stricture, and used it only as directed. Very little food had been taken during the day, the patient having less appetite than on yesterday, but there was only slight nausea and no retching or vomiting.

The sudden diminution of his allowance of whiskey, or its entire suspension, did not seem advisable, but the patient stated that he had frequently stopped off without bad effects. On April 25, 1889, the patient reported that he slept well during the night, and that he was comparatively comfortable to-day. His temperature was 99° and his pulse 85. The urine had been passing involuntarily through the perineal opening, and a small quantity had escaped also through the meatus, but had not been attended with scalding as when passed in a stream, nor had there been any repetition of the rigors. He was taking two-grain doses of quinine, with the whiskey, every three hours. Having some discomfort at night from the passage of urine through the penile urethra, he was given a hypodermic of morphine and atropia. On April 26, 1889, he passed a good night, and relished his breakfast; with pulse and temperature normal, and having an absolute repugnance to the whiskey. The two-grain dose of quinine was continued alone every four hours. The urine was discharged upon rising, by the meatus and the artificial opening; but no longer caused local or constitutional disturbance, so that the future progress of

the case is not likely to be attended with anything notable.

It is evident that the perineal opening will gradually close, and the natural outlet by the meatus be relieved of the impediment to the free discharge of urine, so that a radical cure may be confidently expected.

As the final result must be somewhat protracted, I will undertake to report any untoward feature which may become developed while under my observation, and the reader may verify the adage that "no news is good news."

It might be supposed that the use of a sound or bougie would be advantageous in this case to preserve the lumen of the canal, but my observation upon the after-treatment of such cases, leads me to the firm conviction that the most complete rest of the tissues, and the greatest freedom from any irritation secures the best result.

I would refer the reader to my article on "Division of Strictures without Subsequent Sounding," in the *Atlanta Medical and Surgical Journal*, April, 1884, for my views on this subject. But the following paragraphs from it will suffice in this connection:

"If any explanation is requisite for the full comprehension of the principle involved in the non-interference after division, it may suffice to state that the contractile tissue comprising the stricture, being completely divided at one point, draws away from the line on both sides, leaving a gaping open space so that no union can ensue if left to heal by granulation of this raw surface. The use of dilating tubes of any kind is calculated to irritate this exposed surface, and expose the case to serious troubles, with which all are unfortunately too familiar to require any enumeration in this place."

"A number of close strictures, and some of them located at the bulbo-membranous division of the urethra, have been divided with the urethrotome of Maisonneuve, leaving the cases for ten days or two weeks without interference, and then only using a large bougie a single time to verify the free opening of the canal."

—The *Montreal Medical Journal*, June, 1889, states that a distinguished professor in the University of Aberdeen has been taken to task for making a remark which was understood to imply that, as compared with pathology, materia medica was not of much importance.

THERAPEUTIC NOTES ON ACETANILID (ANTIFEBRIN).

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In a study of the physiological action of antifebrin and antipyrin, published in the *Therapeutic Gazette*, June, 1887, the writer gave reasons for preferring antifebrin to antipyrin in almost all cases. Since then he has used the former almost exclusively.

Whenever antipyrin has been recommended, antifebrin has been substituted, and the effects described by the writers have been produced just as well.

The present article will deal with the therapeutic value of antifebrin in some directions which, as far as the writer knows, are original. In parenthesis, a plea may be made for the new nomenclature of these two substances. The medical press, as a rule, uses the names given above. The pharmacy journals almost exclusively call antifebrin, *acetanilid*, and some of the most prominent ones have named antipyrin, *methozin*. When it is considered that these names bear the same relations to the originals that chloride of ammonium does to "sal ammoniac" or nitric acid to "aqua fortis," and moreover that the patented original names alone cause an increase of one-half in the price of the same substance, physicians should follow the example of the pharmacists and speak only of acetanilid and methozin.

Acetanilid has the same effects in acute rheumatism as methozin is said to have. In one case, in which a preceding physician had given heavy doses of morphine without allaying the great pain, ten grains of acetanilid made it possible for the patient to go to sleep in twenty minutes. The dose had to be repeated every four hours. Under salicylate of sodium, and acetanilid as an anodyne, the patient recovered in a week.

In all headaches classed as nervous, acetanilid is as valuable as methozin is said to be, and is a boon for people with "sick headache."

Perhaps the highest value of acetanilid will be found in a direction which I never before have seen suggested in print. In the study of its physiological action mentioned above, it was stated that acetanilid acts on the pulse-rate similarly to digitalis, and on the arterioles like ergot. My father, Dr. J. C. Barr, first utilized this action in pneu-

monia. In this section pneumonia has a fatality that is distressingly unique. A physician coming here with however much experience with that disease will see his patients die most unexpectedly to him. It is also very prevalent. Of course acetanilid has been used as an antipyretic in all diseases; but its rational use gives great results in pneumonia, regardless of the fever. The use of aconite and veratrum viride in the first stage—not to speak of phlebotomy—has high recommendations. In acetanilid we have an agent that contracts the arterioles, and slows the pulse-rate, while at the same time it is a nerve tonic and produces a sense of well-being in a marked degree, and unlike depressants does no harm in the second or third stage of the disease. Relying on this physiological action, discovered in 1887, my father and I began to use acetanilid in pneumonia, in the first stage, to lessen the violence of the congestion and inflammation; in the second stage, as a tonic and to keep down the fever—which causes death from hyperpyrexia and its changes—and, at the same time to cause the products of retrograde metamorphosis to be better thrown off by the stimulated skin and kidneys; and, in the third stage, because of its tonic action on the nervous system and digestive apparatus. The results of this treatment have been decidedly satisfactory. Although it is impossible to estimate "might-have-been's," I have not the shadow of a doubt that it has lowered the death rate greatly; so much so, that the disease has lost the terror it formerly had for me, and I look upon acetanilid in pneumonia as I do upon quinine in malaria. I have never had a chance to see whether a large dose would abort the disease in the beginning, but I believe it promises as much in this direction as a sensible man may expect.

Rational therapeutics have little to do with dose-tables. The physiological action of the drug must be maintained in the first and second stages of the disease, and practically this may be done by keeping the temperature below 100° (Fahr). As an average, seven grains every four hours will do this. After a time a certain tolerance is established. It is best to give acetanilid in capsules, as its incompatibilities with certain liquids is a delicate subject, not yet settled. Of course all the functions of the body must be kept in good condition, and acetanilid used as a valuable part of the expectant plan of treatment.

I should like further opportunity to try acetanilid in the morphine and alcohol habits. An old man with a chronic disease of long standing had long been accustomed to take four ounces of paregoric *per diem*, with more or less morphine during the night. He also was addicted to drinking to excess. His wife, applying at a drug store for morphine in my presence, I induced her to get a mixture containing seven grains of acetanilid to the fluid drachm, with enough quinine to make it bitter. Continued use of the acetanilid, the opium being stopped short, has caused the man to be comfortable, to sleep at night, and to be able to quit drinking entirely for a month. Having taken large quantities daily for weeks, I know there is no approach to the formation of an acetanilid habit in a nervous person.

This case, it seems to me, warrants the hope that the drug may have a certain use in alcoholism and morphinomania. Its action on the vaso-motor nerves, mentioned in my paper of 1887, indicates the use of acetanilid in hemorrhages. I have used it only in hæmoptysis, and it has never failed to promptly check the bleeding.

In my judgment of this drug I have especially endeavored to avoid confusing *post hoc* with *propter hoc*, and I have omitted reference to therapeutic uses of acetanilid about which I am not yet certain, as well as to those which I have seen published.

THE POISON OF THE RATTLESNAKE.

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I have never been much afflicted with what Dr. John Hawley calls "The Medical Journal Habit," German or American. The articles of Dr. Blackwood, of Philadelphia, and Dr. Milner, of Texas, in the REPORTER last year, have forced me to say something in regard to the poison, especially of the rattlesnake. Dr. Blackwood is of the opinion that the cotton-mouth is more poisonous than the *Crotalus horridus*. This is contrary to Dr. Mead, a celebrated English surgeon and naturalist, who lived about two hundred years ago. He was of the opinion that the cobra-di-capello, of India, and the rattlesnake of America were two of the most poisonous snakes in the world.

I have witnessed a full-grown squirrel, running up and down the body of a tree, its hair ruffled up, chattering in great distress, trying, it would seem, to keep among the branches of the tree, but drawn by a power it could not resist to come to the ground, which it finally did, and was stricken by a large rattlesnake with nine rattles. It fell dead by the side of the snake as quickly as if it had been shot through the brain by a rifle ball.

The curability of a human being from the bite of so poisonous a snake would depend upon the age of both human being and snake, also upon whether the part bitten was covered with clothing or not—in other words, a young snake with only a "button" on the end of his tail, that is, a snake one year old, would not have poison enough to kill an adult, whereas he would kill an infant.

All poisonous snakes I ever examined had two rather large hollow fangs lying in the roof of the mouth. At the root of each fang is a cyst full of virus, which empties into each fang.

When the snake is angry he coils himself up, throws his head back, and the fact that his jaws are joined only by a ligamentous symphysis enables him to throw the upper jaw back so far that his fangs, instead of lying flat in the roof of his mouth, now stand out at right angles, and when they are driven into any substance, the pressure exerted by their base upon the cyst containing the poison forces it through the hollow fangs into the flesh bitten. Should one or both fangs be broken off he is provided with from four to six rudimentary fangs, ready to take the place of the broken one.

I have described an old acquaintance, whom I have known from my boyhood. I have seen him in all his majesty in the mountains of North Carolina and Georgia. The largest I ever saw measured six feet two inches.

He also dwells here in Missouri, and the timber variety is not to be smiled at, although the prairie rattlesnake is not more dangerous than the copper-head.

The symptoms of a rattlesnake bite may be said to be an intense burning in the wound, extending over the body, even to the top of the head; vertigo, nausea, and vomiting; dimness of vision; spasmodic action of the muscles, followed by reaction and great depression of all the vital powers; and finally, death from syncope.

From the foregoing we see that stimulants are indicated in the treatment. Experience amply proves that alcoholic stimulants are sufficient to procure recovery in the most cases; and *intoxication cannot be produced until the effect of the poison has been overcome.* It is only in cases in which the stomach will not tolerate whiskey in large doses that we need a more sure and prompt remedy. Such a remedy was given to the profession in the United States, in 1858, by Prof. Wm. A. Hammond, M. D., now Retired Surgeon-General, U. S. A., but at that time Ass't. Surg., U. S. Army. The remedy referred to is "Bibron's antidote." The following is the formula:

℞ Potass. iodidi . . . . . gr. iv
Hydrarg. chloridi corros. . . . . gr. ij
Bromini . . . . . ʒv
M.

Sig. Ten drops of this mixture, diluted with a tablespoonful of wine or brandy every hour, as symptoms may indicate. It should also be rubbed on the bitten part.

In the *American Journal of the Medical Sciences*, Vol. XXXV, 1858, page 94–96, Dr. Hammond's experiments are given in detail. In the same volume, pages 375 and 376, the antidotal power of the mixture above referred to is demonstrated. Dr. E. M. Walker, of Texas, reports experiments with Bibron's antidote in the *American Journal of the Medical Sciences*, Vol. XXXVI, pages 567 and 568. In the same volume, page 575, Dr. A. M. Sabal, of Georgia, reports experiments with the antidote. Dr. D. O. C. Henry, in the same journal, Vol. XXXVIII, reports the saving of the life of a negro, bitten on the ankle by a rattlesnake, by means of Bibron's antidote.

It is astonishing that a remedy so well established as this was thirty years ago, by a man of the acknowledged ability of Dr. Hammond, should be lost sight of, and that physicians should, when called upon to treat snake bite (which is very seldom, as though doing a country practice, I have only treated two cases in thirty years), should have no certain remedy. It is, as before stated, so generally known, by people living in the country, that whiskey, from one to two pints, will cure snake bite, that it is usually tried.

I will briefly report two cases of rattlesnake bite which I have treated with Bibron's antidote.

On August 8, 1877, I was called to a young woman, 18 years old, who, her

father informed me, was two hours before engaged in picking blackberries. Reaching for some berries with the right hand through some undergrowth, something stuck in the ring finger of the right hand. Paying no attention to this, she placed her left hand on a stump, to enable her to reach further for some more berries. On this was a rattlesnake, the same which had bitten her on the finger, and which this time bit her on the upper lip. Her brother killed the snake. It had a "button," but no rattle. She was carried to the house, some two hundred yards distant. Whiskey was given her, but she vomited it up as fast as she swallowed it. I saw her two hours after she was bitten. Her pulse was very weak, and her face swollen so that her eyes were closed. I gave her ten drops of Bibron's antidote in a spoonful of brandy and water. I also rubbed the bitten parts with it. In one hour I gave another dose, and left directions, if the swelling did not recede, to keep it up all night. I saw her the next morning at ten o'clock, A.M. At that time all the swelling had disappeared, and she needed no further treatment.

The next case occurred in the summer of 1880. A negro man was bitten on the leg. The snake had five rattles. The man's stomach did not tolerate whiskey. The bromine mixture acted like a charm.

This is my total experience about snake-bite in a practice of over thirty years.

One word about the cobra. Some one in MEDICAL AND SURGICAL REPORTER, year before last, said the cobra bite was painful. This must be a mistake. Cleopatra was bitten by a cobra. Her death, as given by Shakespeare, accords with the description by a modern English surgeon, who, to keep his Hindoo servant who had just been bitten, awake, tied his hands to the back of his gig, plied him with brandy, made his horse trot, and the servant trot also, to keep him from going to sleep. In one hour he was well.

—Professor Du Bois-Reymond has been elected Corresponding Member by the Swedish Academy of Sciences.

—The well-known chemist, Professor August Wilhelm von Hofmann, who was for twenty years professor in the Royal College of Chemistry in London, has been appointed Corresponding Member by the Vienna Academy of Sciences.

THE CLIMATIC CAUSATION OF CONSUMPTION.[1]

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The facts presented were mainly included in twenty-four tables and as many diagrams, showing by months the relations of sickness and of deaths to atmospheric temperature and absolute humidity. The statistics of sickness included those of the State of Michigan, the United States Armies during the late war, and of the British Armies in India. The statistics of deaths included those of Michigan, Massachusetts, United States Armies, British Armies in India, and of the city of London, England. Enormous numbers of cases of sickness and of deaths were tabulated and graphically exhibited. They seemed to prove that, in each part of the world, consumption follows in months succeeding those in which diseases of the air-passages—including influenza, tonsillitis, croup, and bronchitis—prevail; that the same is true of small-pox, scarlet fever, and diphtheria—communicable diseases believed to enter by way of the air-passages; and that these diseases last later than the unfavorable temperature and dryness according to the average duration of the disease—the acute diseases occurring most in the same month, and small-pox and consumption following apparently about three months later than the exposure.

I do not accept the view that there is only one cause or condition leading to consumption. To me the evidence is conclusive that the causation of consumption is complex. But, though complex, I believe the problem is now quite within our grasp, in all its most important features, if we only hold fast to the truths we have learned as to the relations of consumption to low wet places, while we grasp the obverse idea of the favorable influence of high, dry, and sunny places. We must hold fast to this double image of one great truth, while we lay hold of that one which teaches us the great importance of proper clothing, food, and all that goes to make the nourishment of the body fully equal to all demands upon it; and grasp

[1] Abstract of a paper read in the Section on State Medicine of the American Medical Association at Newport, June 26, 1889.

also the great truth which Dr. Robert Koch has given us—that there is a specific cause which, *under favoring circumstances and conditions*, is an essential factor in the causation of consumption. While holding all this in mind, I ask you to consider how it is that this specific cause usually enters the body. It is a fact that, just as the specific causes of many other diseases (as is proved by the statistics of sickness and deaths which I present to you at this time), just as they enter and cause the disease in proportion to the coldness and dryness of the atmosphere, so the specific cause of consumption, apparently and probably, finds lodgment in the lungs and air-passages, other things being equal, in proportion to the coldness and dryness of the atmosphere. Moreover, the danger of anto-infection and of death to one in whose body the disease is already present is increased by exposure in an atmosphere unusually cold and dry, while the condition of the blood is such that saline and albuminous exudates are liable to occur in the air-passages.

Finally, in order to grasp the most at once, we need to link the facts together—realizing the fact that over the low *wet soil* there is generally a *cold dry atmosphere*, thus making it plain that the facts observed and collated by Drs. Bowditch and Buchanan are entirely in harmony with those of Dr. Koch, and with the enormous numbers of facts which I have tabulated. All these facts, I say, prove beyond question that there is a causal relation between the inhalation of such an atmosphere and the occurrence of all the ordinary diseases of the air-passages, and also of those communicable diseases which enter by way of the air-passages, including tubercular consumption.

ELECTROLYSIS IN THE TREATMENT OF STRICTURE OF THE RECTUM.[1]

BY ROBERT NEWMAN, M. D.,
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The modus operandi of electrolysis in the treatment of stricture of the rectum is virtually the same as in stricture of the urethra. A good galvanic battery is used, and the negative electrode is introduced per anum to the seat of the stricture, while the positive sponge electrode closes the circuit, and is placed in the hand of the patient, or on some other part of the body. The strength of current applied varies from 5 to 15, or even to 20, *milliampères*, according to the seat of the stricture, the nature of the neoplasm, the size of the electrode and other conditions. The *sèance* may last from 5 to 15 minutes, and under circumstances may be prolonged to 30 minutes. No force should be used. The electrode should be kept steadily against the stricture, and only guided, until the electrolytic action does the work of enlarging the calibre, and then the instrument passes the obstruction. The electrodes have at one end a metal bulb of copper or brass, which is silver plated; some are flat, others round; the latter more egg-shaped. They are made in sets of different sizes. The stem of the electrode, except the extermities, is insulated with hard or soft rubber; some are stiff, but most of them are flexible. According to circumstances, needles are sometimes used for the negative pole. *Sèances* may be repeated in one or two weeks.

The report of my first case, treated in 1871, is complete and interesting, and shows the perfect success obtainable by electrolysis. It was a very bad stricture, complicated with five fistulæ, beginning in the rectum. The patient was permanently cured, and after her death later from peritonitis, the specimen was procured and showed no sign of relapse, and a microscopical examination disclosed no heterologous tissue, and nothing strictly neoplastic. All the other cases I have minutely reported, and have documentary evidences from different reliable sources bearing upon them. In recapitulating the facts in these twelve cases, we find some interesting items. It seems that females are more disposed than males to have rectal stricture, as out of twelve cases, only two were males. The ages of the patients run mostly between 30 and 40 years; the youngest is 24, the oldest 62 years old. The two males were comparatively young men, respectively 23 and 26 years old. Eight cases were of single strictures; four had multiple strictures. The duration of the malady was from six months to twenty years. The causes varied; but hemorrhoids and constipation were important factors; other causes were: syphilis, venereal enteritis, and dysentery. It is certain that a rectal stricture may follow any inflammation of the

[1] Abstract of a paper read before the Section of Anatomy and Surgery of the American Medical Association, at Newport, June 27, 1889.

rectum. One case had the complication of five fistulæ commencing in the rectum and ending externally in different parts of the vulva and gluteal regions. As soon as the stricture was cured, the fistulæ healed up without any treatment. Only two cases had no previous treatment; two had medical, and the rest surgical treatment; six of the patients had been operated upon with the knife. Not in a single case had the previous treatment been successful; all were entire failures, and all that can be claimed, in some exceptional instances, was a temporary relief, followed by relapses.

Even the most sanguine operator will admit that proctotomy must be followed by the use of a rectal bougie at regular intervals. If we now compare all other methods used formerly with the treatment by Electrolysis, we find that the latter has at least improved every case, and in the majority of cases has effected a cure. The three cases 5, 6, and 8 were certainly improved, although in the end they may not prove satisfactory. One patient had too many complications, and could not have been permanently benefited. The second was an aggravated case, and the patient too poor to attend to herself or even to come regularly for treatment. This case was then operated upon, and afterwards she had to use a rectal bougie regularly. By this means she kept the stricture from closing up again, but after 4 years had a relapse with complications, and finally died. The improvement in the third case (No. VIII) has been graciously acknowledged by several surgical authorities. However, the patient had to leave the city, thereby interrupting the treatment and a papillomatous growth, which was considered by some to be cancerous, complicated the case to such a degree that a cure could scarcely be expected under any treatment.

These cases are given just as they were, without claiming any success. The remaining nine cases, however, were cured by the electrolytic treatment; and, as far as known, no relapse had taken place, in from one to ten years respectively. In one case nothing has been heard from the patient.

The best results were achieved from the method used in the treatment of urethral strictures by electrolysis, that is, with metal bulbs at the negative pole, and with weak currents at intervals. But the nature of the parts treated permits the current to be applied stronger and oftener than in the urethra. While in the urethra a current of 5 *milliampères* is strong, we may increase the current in the rectum to 15 and sometimes to 20 *milliampères*. We may prolong a *sèance* to from 10 to 30 minutes and repeat it in four days. Stronger currents and the treatment by needles have not proved as successful.

I hope not to be called too sanguine or an enthusiast, when I make the following conclusions:

1. Electrolysis, in the treatment of stricture of the rectum, is not a panacea; on the contrary failures may happen, and it probably will ultimately fail if the stricture is due to *carcinoma*.

2. Electrolysis will give improvement to the rectal stricture when all other means have failed.

3. Electrolysis will *cure* a certain percentage of cases, without a relapse, better than other modes of treatment and without the necessity of using an after treatment or using bougies.

4. The best chances for a cure are in cases of fibrous inflammatory strictures.

5. The best mode of treatment is with a metallic bulb, as negative, weak currents and intervals of from four days to two weeks. (Further experience in time may change this rule.)

From other reliable sources more cases of successful treatment by Electrolysis are added, as also extracts from letters as follows:

(1) One case of stricture of the rectum treated with electrolysis by Samuel Benton, M. D., M. R. C. S., of London. In a private letter Dr. Benton writes from London, June 1, 1889: "The two patients whom I treated for stricture of the rectum by Electrolysis, and published the cases, have remained well and are permanently benefited."

(2) Dr. W. T. Whitmore, of London, writes that he has treated cases successfully with Electrolysis. His paper was read at a meeting of the West London Medico-Chirurgical Society, and is now in press.

(3) Dr. W. E. Stephenson, of London, writes: "Strictures of the rectum can, like all other strictures, be treated by electricity. The amount of success achieved by these means depends upon the nature of the obstruction. In some cases a cure can be effected."

(4) One successful case by Dr. S. T. Earle, Jr., of Baltimore, who kindly has sent the notes. It was a case of syphilitic stricture of the rectum of long standing, treated suc-

cessfully by Electrolysis, no other remedy or medicine being used during the treatment by electrolysis. Previous operation by posterior linear proctotomy gave no permanent benefit. The result of Electrolysis has exceeded his most sanguine expectations and the patient has had no relapse.

SOCIETY REPORTS.

AMERICAN MEDICAL ASSOCIATION.

Fortieth Annual Meeting, at Newport, R. I., June 25 to 28, 1889.

First Day, June 25.

The meeting of the general session was called to order by DR. HORATIO R. STORER, Chairman of the Committee of Arrangements. Rev. Thatcher Thayer, D. D., the senior clergyman of Newport, offered prayer.

Hon. Herbert W. Ladd, of Providence, Governor of Rhode Island, delivered an address of welcome.

THE PRESIDENT, DR. W. W. DAWSON, of Cincinnati, delivered the Annual Address, in which he stated his belief that the Anglo-Saxon race was destined to be the greatest, in point of numbers and intellectual attainments, in the world. Most of the race will be in America. He then spoke of the

Physician of the Future,

and said: By the last census it was shown that nearly four thousand schools for higher learning existed in the United States, and that nearly four hundred of them ranked as Colleges and Universities. In these are massed, yearly, sixty thousand pupils. They, together with two hundred thousand common, or primary schools, in the higher grades of which the curriculum nears that of many colleges at home and abroad a third of a century ago, may be looked upon to supply, year after year, a better material from which medical students will be drafted.

Every one traveling through the States—especially of the West and South, and those situated in the far away mountains, and on the Pacific—must be impressed with the onward march of public instruction, the gradually increasing general intelligence, and the vast sums that are annually expended for the education of the people. Public school buildings, by their size, adaptation, and attractive surroundings, give an impression which the most skeptical must feel, a promise of the future which cannot be misread. From such as these, scientific medicine must reap a share. Every teacher, every one connected with the examination of candidates for the medical degree, knows—and the knowledge is reassuring—that, year after year, the grade of the medical student is advancing, that the material out of which the practitioner is made, is constantly growing better, becoming stronger; in other words, that the preliminary education of our students is steadily becoming more broad and comprehensive. I gave utterance to this view a few years ago, in an address which I had the honor of delivering to the State Medical Society of Ohio. Time, I believe, has confirmed what I then said. This confirmation is seen in our graduates as they go forth to take up the line and battle of life. Are they not the equals of the graduates in other professions, in law and theology? As life advances, are they not the peers of any, in all the useful elements of true manhood? Are they not the citizens of best rounded characters, citizens most relied upon by their neighbors in foul as well as fair weather.

Again, in addition to facilities already referred to, the most generous provisions are being made, all over our land, for institutions which will be worthy to be called Universities. From these, graduates will emerge, worthy to rank by the side of those bearing the prized degrees from Oxford, Cambridge, Paris, Heidelberg or Leipsic. During the Summer of 1888, I witnessed the beginning of a University in California, which in scope and equipment will surpass, probably, any school upon the continent. Should Governor Stanford live to develop his conceptions, that far-off State will have an institution of which, not only the Pacific Coast, but our entire country, yes, all civilization, will feel justly proud. It may be so liberally endowed, that it will command the best abilities of the world.

Defective as has been much of the material, yet have we not produced some marked results? Our best are equal to the best anywhere; mediocrity always and everywhere finds its own. The poor in medicine, the weak brother, however much we may deplore him, however much we may train him, we have, like the poor, always with us. This is the lot of humanity in all lands, amongst all peoples, new or old.

A word as to the physical qualities of "The Coming Doctor." Recently a distinguished foreign traveler, in speaking of our educational facilities and national peculiarities, said: "Students are much calmer than their colleagues in Europe. They don't at all trouble themselves about politics or affairs outside their line of duty, and with the practical sense which animates the nation, they try to make the best use of their time. They fight no duels, and it is only for health and recreation that they take part in various sports and games." These remarks apply with equal, in fact, with greater force, to medical students.

Is this picture overdrawn? One word more. In many of the States of the Union, in addition to the liberally supported free schools and schools for higher education, already colleges have been established through the munificence of the General Government, in which the degrees of A. B. and A. M. may be obtained. They are absolutely free colleges, at which the poorest boy in the commonwealth may receive a classical education. And here, you will allow me to say, we cannot insist too strongly upon the necessity of classical education; without it the medical man must ever be at a disadvantage. Without a knowledge of Latin and Greek, sure and distinguished success is uncertain. The student may neglect algebra and the higher mathematics, but let him, by all means, have a liberal knowledge of languages.

At the last commencement of one of our Western schools, "forty per cent. of the graduating class had been admitted on diplomas from literary or scientific colleges. The balance of the class had received from one to five years of academic or collegiate instruction." This college is without endowment—depending entirely upon the learning, devotion, and sacrifice of the Faculty.

Let us not, gentlemen, be impatient; the influences are already projected which will give us students equal to—up to—the highest standard of preliminary preparation. If we have accomplished so much in our primitive stage, what may we not expect when all our great preparatory works come fully into action?

From this view of the resources from which medical students are to be drawn, and of the liberal preparations and facilities for their culture, we may well ask, what is the profession doing to profit from such advantages?

Some of the classical schools at Oxford and Cambridge were organized as early as the thirteenth century, but the systematic, scientific study of Medicine and Surgery came long subsequently—not for four hundred years later—about the middle of the eighteenth century. It was first projected in Great Britain, and soon after in our Atlantic cities. Unlike the Old World, our fathers had a wilderness to conquer before progress could be made. When the Pilgrim Fathers left England, reading and writing were rare accomplishments; chimneys in that country had just been invented, and flock beds were luxuries. The adventurers—the emigrants to these shores from that ancient and imperfect civilization—had much to learn; but in the midst of their pitiable ignorance, facing great hardships and pressing wants, they were quick to provide educational opportunities for all. The result of their efforts are apparent—they are before us. Could more have been accomplished in one century?

The Section on Practice of Medicine, Materia Medica, and Physiology, was opened with an address by the Chairman, Dr. F. C. Shattuck, who spoke of the progress made in the diagnosis and treatment of diseases. Dr. I. E. Atkinson, of Baltimore, read a paper on some of the

Rarer and Graver Forms of Cinchonism.

Cinchona and its allies are generally given, he said, without regard to idiosyncrasies. Intoxication, the result of cinchonism, may be very grave. The absolute frequency of cinchonism is not great, but is worthy of notice. Dr. Atkinson has collected the histories of over fifty cases of quinine amaurosis, in nearly all of which blindness was present. Vision is often affected without suspicion of the influence of the drug. In most cases the blindness comes on suddenly, but in many its advance is gradual; it may even occur in twenty-four hours. In all, or nearly all, cases sight is recovered, but the eyes are often affected for a long time, even as long as two years, and permanent color-blindness often results. The blindness is almost complete, the color-blindness is marked for a long time; the pupils are much dilated, the discs are white and pallid; there is contraction of the visual field; impairment of hearing is often noticed; and some patients have anæsthesia of the cornea, strabismus, etc. The pathoge-

nesis of quinine amaurosis is not at all understood, although many explanations have been offered. The dose of quinine sufficient to produce blindness is very variable. H. C. Wood had seen it after doses of twelve grains. Blindness always results when the cases are fatal. As immense doses are taken without causing blindness, the latter undoubtedly occurs as an idiosyncrasy. Tinnitus aurium is common, but permanent deafness has never been recorded, even complete temporary deafness has probably never been observed. In those already deaf this deafness may be increased. In the ear there is much anæmia. Enormous doses of quinine are necessary to produce death, and fatal cases of cinchonism have rarely been recorded. The cardiac conditions described in the autopsies of the various fatal cases are very dissimilar. Sufficient attention has not been given to the dangerous and toxic effects of quinine in large doses.

Dr. John H. Musser, of Philadelphia, read a paper on

Clinical Aspects of Vomiting.

After reviewing the act of vomiting, he divided it into direct and reflex. Changes in the organs of sense, etc., will also cause vomiting. The duration, time of day, and character of vomitus should all be considered in looking for the cause. In naso-pharyngeal catarrh, and in chronic uterine disease, morning vomiting is not infrequent. Sudden and painless vomiting in the aged is often one of the first symptoms of cerebral hemorrhage. There is no exhaustion in this kind of vomiting. If collapse occur, the vomiting may be uræmic. Prognosis is always grave in these conditions. In all conditions of vomiting the causes should be looked for.

In the Section on Surgery and Anatomy, Dr. N. P. Dandridge, of Cincinnati, Chairman of the Section, read a paper on

Surgical Interference in Fractures of the Spine.

His conclusions are: In fractures of the cervical vertebræ, there is indicated immediate reduction of any displacement by extension and manipulation under an anæsthetic, followed by continuous extension and immobilization. In all fractures of the lumbar or dorsal spine, involving the bodies or the arches, reduction is effected, with or without the plaster-jacket, by the hammock suspension, preceded, if there is evident displacement, by extension under an anæsthetic. When symptoms indicating injury of the cord persist without improvement, resection is indicated. Immediate operation would be indicated when there is marked depression of the arches with symptoms of paralysis. Long continuance of the symptoms is not in itself a contra-indication to operation. We have, in suspension, the means of alleviating some of the sequelæ of fracture of the spine.

Dr. Maurice H. Richardson, of Boston, reported a series of

Fifty-Seven Operations on Peripheral Nerves,

taken from the records of the Massachusetts General Hospital. Of this number twenty-eight had been performed by himself. Thirty-five cases of neurectomy for neuralgia were reported very briefly. Most of these cases were affections of the trifacial nerve. The earliest cases of trifacial neuralgia were treated by section of the motor nerve. This was probably done with the idea that the pain was caused by facial spasm. These operations were unsuccessful. In the operations of later years is to be seen a constantly increasing thoroughness and severity. In the beginning there was only a subcutaneous section of the nerve, but now as much of the nerve-trunk as possible is excised. In obstinate cases the nerve is divided at the foramen of exit from the skull. The result of these operations has been an almost invariable temporary success. The period of immunity from pain lasts from a few weeks to several years, while in some a permanent cure has followed. The length of the period of relief bears some relation to the amount of nerve removed.

Several cases of buccal neuralgia were treated after the method of Zuckerkandl—by dividing the main trunk of the nerve as it emerges from the space between the coronoid process of the lower jaw and the insertion of the temporal muscle. Several methods of operating on the inferior dental nerve were described; the most important of these was the total evulsion of the nerve by trephining over both dental and mental foramina.

In the Section on Obstetrics and Diseases of Women, Dr. W. W. Potter, of Buffalo, N. Y., read a paper on

Boracic Acid in Gynecic Practice.

He applies the remedy as an injection, dry

to the vagina, and in the form of boracic acid with alternating layers of cotton. He allows this dressing to remain a week in some cases, and thinks once a week often enough for these applications. He has had good results with boracic acid after plastic operations. In these cases he leaves a rope of borated cotton hanging from the os over the perineum.

Dr. Potter also regards boracic acid as a remedy of great value in sterility due to acrid secretion, which destroys the fecundating power of the sperm. He says it is one of the best powders to render operative wounds in the genital tract aseptic. Boracic acid is suited to many gynecic uses in which an antiseptic is required.

Dr. William H. Taylor reported a case of Ectopic Gestation successfully treated by Galvanism.

Dr. W. H. Wathen, the Chairman of the Section, delivered an address on the Pathology of Ectopic Pregnancy and Pelvic Hæmatocele, in which he took the ground that ectopic pregnancy is always primarily tubal, with the possible exception of ovarian pregnancy.

In the Section on State Medicine, Dr. W. C. Rives, of New York, read a paper on the importance and essential needs of

Local Boards of Health,

in which he said that it is to local and not to State boards that we must look for the most effective work.

In the Section on Diseases of Children, following the address by the President, Dr. J. A. Larrabee, Dr. T. B. Greenley, of West Point, Ky., read a paper on the

Management of Infants during the First Year.

The paper was devoted almost exclusively to gastro-intestinal disorders. Dr. Greenley spoke of the predisposing causes of mortality—intemperance, syphilis, etc. In the feeding of children he believes that pure cow's milk is better than the diluted milk. He objects to the use of starchy foods. If a wet-nurse be selected, she must be carefully watched, as she may neglect her foster-child, or administer an opiate or alcohol. The author considers that mothers who allow their infants to be nursed by hired women are often guilty, unintentionally, of infanticide.

In the Section on Dermatology and Syphilography, the Chairman, Dr. L. Duncan Bulkley read an address on the

Recent Advances in the Treatment of Diseases of the Skin,

in which he referred to the use of the curette in the removal of moles, warts, lupus, etc., and also to other forms of mechanical therapy. The employment of electrolysis for the destruction of superfluous hairs and of nævi, and for producing absorption of tumors was also mentioned. Unna's various modifications in treatment were alluded to. Dr. Bulkley has been disappointed in the results obtained from the use of ichthyol.

Dr. D. W. Prentiss, of Washington, read a paper on

Change in the Color of the Hair from the Internal Use of Pilocarpine.

He first referred to two cases of his own. In the first, a woman twenty-five years old, who employed pilocarpine to relieve uræmic symptoms resulting from anuria had her hair changed from light brown to black. In the second, a woman seventy-two years old, who took jaborandi for disease of the kidneys had her eyebrows changed from white to black. The author quoted cases from German and other medical literature, in which the use of pilocarpine had caused the hair to grow where it had fallen out, in some instances the new hair having a different color from the old.

In the Section on Laryngology and Otology, Dr. J. H. Bryan, of Washington, D. C., read a paper on the

Diagnosis and Treatment of Diseases of the Antrum.

The author remarked that, of the surgical affections, suppurative inflammation plays the most important part in diseases of the antrum; until recently it was regarded as a rare condition. It occurs generally after the first dentition. Among its causes are: (1) traumatism; (2) acute infectious diseases; (3) syphilis; and (4) extension of inflammation from carious teeth. The condition called hydrops antri generally results from catarrhal affections of the nose, in which the secretion is sero-mucous; but where it is muco-purulent it results from extension of inflammation from diseased teeth.

Four conditions, after eliminating wounds and exanthemata, may give rise to pus in the nasal chambers: (1) foreign bodies;

(2) disease of bone; (3) secretion of pus from the antrum of Highmore; and (4) secretion of pus from the frontal sinus and anterior ethmoid cells. The indication for treatment of abscess of the antrum is to let out the pus, drain the cavity, and disinfect it; if the abscess point anywhere, it should be opened there. The tendency of practice is to open these abscesses through the nose, returning to the method of Hunter, after a century during which the practice has been to open through the mouth.

The operation most approved is Cooper's —that through the alveolar process. It has these advantages: It affords the best means for draining and disinfecting, and it can be performed without anæsthetics. On the other hand, it offers facilities for the entrance of food and bacteria, and it sometimes necessitates the extraction of a sound tooth. Mikulicz opens through the lateral wall of the nose where it is thin. This operation gives easy drainage and washing of the cavity, and there is little danger of entrance of foreign particles.

Local treatment, he said, is very important, including irrigation by mildly disinfectant fluids. Permanganate of potash best overcomes fetor. A syringe specially adapted to washing out the antrum from this point was shown by the author, and several cases were reported in illustration of the subject.

Second Day, June 26.

After the general session had been called to order, prayer was offered by Right Rev. Thomas M. Clark, Bishop of Rhode Island.

Dr. William Pepper delivered the

Address in Medicine,

which was devoted to thoughts suggested by the life of Benjamin Rush, who is hard to equal in the range of subjects in which he interested himself, and in his grasp of them. He was a genuine social reformer; his arguments were compact, clear, and forcible. He was one of the earliest advocates of higher medical education. He should not be judged too harshly for his advocacy of bleeding, for it is difficult to believe that in certain stages of disease the bleeding practice did not do good.

In the Section on Practice of Medicine, Materia Medica, and Physiology, Dr. Francis Delafield read a paper on

Chronic Endocarditis,

in which he referred to the great frequency of the disease. The disturbances of the circulation are due to the endocarditis, dilatation, and hypertrophy of the ventricles, inflammation or degeneration of the wall of the heart, inflammation of the coronary arteries, abnormal heart-action, and the associated pulmonary emphysema, chronic endarteritis, and chronic Bright's disease.

In the Section on Surgery, Dr. Charles B. Porter, of Boston, read a paper on

Exstroversion of the Bladder,

in which he gave an interesting account of this congenital deformity, and considered historically the operations that have been suggested for its relief. Up to the present time no operation has secured continence of urine. In an infant or young child, Wyman's method—that of bringing together the freshened edges of the bladder—is, in suitable cases, the best. The method by flaps is adapted to both sexes and all ages.

Dr. Dudley P. Allen, of Cleveland, Ohio, read a paper on

Litholopaxy in Children,

in which he said that the operation is adapted to medium-sized and small stones.

Dr. W. T. Briggs, of Nashville, Tenn., read a paper on

Choice of Operation in the Removal of Vesical Calculi in the Male,

in which he expressed his preference for the medio-bilateral method, because it opens up the shortest and most direct route to the bladder, passing in a straight line from one-third of an inch anterior to the verge of the anus to the neck of the bladder; it also facilitates the introduction of instruments and the extraction of the calculi. Moreover, it divides parts of the least importance. The incision following the median line does not encounter any structure of importance, nor does the slight bilateral section of the deeper parts do violence to tissues of vital consequence.

Dr. J. Collins Warren, of Boston, read a paper on the

Management and Treatment of Large Herniæ.

In the very large herniæ the patient usually suffers from some form of disability, which prevents him or her from exercising

that control over a hernial tumor which an able-bodied and intelligent person is usually capable of doing. In a large number of cases obesity is a predisposing cause, especially in women. The type of man usually afflicted with a large scrotal hernia is twofold. Either he is a large, middle-aged business man, so engaged with his work, or of so callous a temperament, as to have neglected his disease until driven to treatment by fear of permanent disability; or, he is an old and feeble individual; or so obtuse as to be unable to manipulate the part so as to effect a reduction, or without sufficient intelligence to apply and keep in place a truss. Finally, there are children with congenital herniæ, whose position in the social scale is so lowly that the little patient has never been able to receive proper care. No special plan of treatment was adapted by Dr. Warren to all these classes of cases, but each case received such treatment as the special conditions governing it seemed to call for. Nine cases were related in detail. In none of these cases was a radical cure attained, but in all the patient has been satisfied with the result of treatment.

Dr. John B. Deaver, of Philadelphia, read a paper on the

Radical Cure of Hernia,

in which he described the operations of Macewen, Baker, Banks, McBurney, and others. The method which the author usually employs is Baker's, modified only in the introduction of the sutures for closing the canal, after the manner of Macewen. He uses antiseptic silk sutures, and a few strands of chromicized catgut placed beneath the superficial set of sutures. The operation that he has done most recently is a modification of McBurney's, differing from it only in that the fundus of the sac is left *in situ*. This, of all operations, he considers the most rational and the least likely to be followed by a return of the hernia. This is the course also pursued in femoral hernia.

Dr. Charles W. Dulles, of Philadelphia, read a paper on

Properitoneal Hernia,

in which he referred to the rarity of the deformity—only three cases with that title having been recorded by American surgeons. The history of these cases indicates that the hernia is for the most part originally inguinal, and is often accompanied by an undescended testicle. After occupying the inguinal canal for a certain time, the obstruction offered by the incarcerated testicle, or sometimes by a truss, forces the protrusion, under a strain, out of the canal and into the loose tissues between the peritoneum and the muscles, or between the muscles themselves, or between the whole mass of muscles and the skin and superficial fascia. They usually occupy a position above and parallel to Poupart's ligament, and stimulate enlargement by hydrocele of the spermatic cord. They are sometimes so large that they overlap Poupart's ligament and hang down over the thigh. They often extend upward and outward as far as the anterior superior spine of the ilium. The treatment is usually by a cutting operation. Dr. Dulles has found the record of a case which was successfully treated by taxis, but his investigations have led him to the belief that this is the most dangerous way to treat it.

In the Section on Obstetrics and Diseases of Women, Dr. Joseph Price, of Philadelphia, read a paper based on

Five hundred Cases of Confinement in a Maternity Hospital,

in which he gave the details of the treatment in a maternity hospital in Philadelphia, with which he is connected. The treatment was after the highest and most approved method of cleanliness. He said the talk a few years ago was to abolish the lying-in hospitals on account of their terrible mortality. The tables are now turned, and the greater mortality is in the private practice. He wished to invite a discussion which would lead to more refinement in the *technique* of the treatment of labor.

Dr. Thomas Opie, of Baltimore, said he had visited the maternity spoken of and found it unique. He had great hopes for the future in this line.

Dr. Hirst, of Philadelphia, considers the plumbing of great importance. In an infirmary where he practises he had the closets put in towers, where the ventilation is excellent, and had within twenty-four hours a fall of temperature. He has found the mortality to be very great in tenement-houses where the plumbing was at fault.

Dr. W. T. Lusk, of New York, thinks that the practitioner should hold himself responsible for the plumbing of the house in which he delivers patients.

Dr. Joseph Taber Johnson, of Washington, D. C., read a paper on

Tetanus Following Ovariotomy.

The rarity of this complication of ovariotomy, and the recent interest in the transmissibility of tetanus, were his reasons for bringing this case before the Section. The history of the case was, in brief, as follows: A solid growth, sarcoma of the ovary, the size of a child's head, was removed. The patient, who was sixty-one years old, recovered rapidly and without complication until, on the morning of the thirteenth day, she developed tetanus, and died on the third day of the disease and fifteenth day of the operation. She exhibited numerous muscular spasms; the mind was clear, the jaws locked. The convulsions were especially active in the neck and back, and during their presence the pulse was notably weaker. The patient died of what appeared to be heart-failure. No other patient in his hospital was affected with this disease, and it was the only case which had occurred in it in the eighteen months it has been in operation. Dr. Johnson thinks there was probably no outside influence. His horses were healthy and he does not drive them himself, so there could be no opportunity for infection in this way. In all cases of inoculation the disease is contracted and the patient dies in a very few days, generally not more than three. His patient got along well until the thirteenth day. The author's case, the case of Homans, of Boston, and that of Richelot, of Paris, are the only cases of this complication Dr. Johnson could find. The room in which the author had operated was thoroughly disinfected.

In the Section on Diseases of Children, Dr. F. E. Waxham, of Chicago, sent a paper on

Intubation of the Larynx,

with report of cases, which was read by Dr. Larrabee. During the past year the author has operated 60 times, and obtained 28 recoveries, or 46.66 per cent., making the total number of 210 operations, with 69 recoveries, or 32.85 per cent. He mentioned the increased percentage of recoveries. Dr. Waxham believes that the increased success is due to improved methods in feeding, greater experience, and better judgment in the management of the cases. He believes in the adoption of the inclined position, with the head down in feeding or when drinking. During the past year the youngest case operated on was six months old. Those that recovered under two years of age were aged respectively fifteen months, and (two) eighteen months. Every case except one was characterized by membranous formation in the larynx.

In the Section on Dermatology and Syphilography, Dr. Carl Seiler, of Philadelphia, read a paper on the relations

Between Acne and Diseases of the Nasal Cavity.

During the past ten years he has observed a great many cases of acne in connection with diseases of the nose, the acne coming and going with the appearance and disappearance of nasal irritation. Acne punctata was observed to be almost invariably associated with atrophic rhinitis, while acne rosacea was associated with hypertrophic inflammation of the nose. It is known, he said, that the blood supply of the turbinated tissue is intimately connected, through the nerve supply, with that of the skin of the face. Dr. Seiler believes that the function of the erectile tissue of the turbinated bones and elsewhere is that of taking up the overflow of blood of neighboring parts as observed in mechanical or nervous irritation. Relief of the nasal difficulty, in many of the cases which had come under his care, caused the acne to disappear without other treatment, local or internal. The connection between the skin affection and that of the mucous membrane of the cavity, seems to be both mechanical and nervous, or reflex, the one reacting upon the other.

Reports of Clinics.

BELLEVUE HOSPITAL, NEW YORK.

MEDICAL CLINIC—DR. LOOMIS.

Pyo-pneumo-thorax.

At his clinic on May 8, Dr. A. L. Loomis introduced a patient with pyo-pneumo-thorax, and said: This patient started off two years ago with suppurative pleurisy. At least, we judge so from the history, which includes an account of chills without high fever. Five months ago he had both fluid and air in his pleural cavity, but he probably had suppurative pleurisy first, as the result of which an opening was made into the bronchial tube. As there is no history of coughing and expectoration at that time, there must have been a valvular opening from the

lung outward, as sometimes happens, so that the air was admitted into the pleura; but the pus was not allowed to go into the bronchial tubes. Three weeks ago, he began to cough and expectorate for the first time, and the opening into the bronchial tube probably became complete at that time. There is not much fluid now in the pleural cavity; for he was aspirated a few days ago and six quarts of pus were taken from his side.

Now, you will find tympanitic resonance and loss of vocal fremitus; the displacement of the heart to the left, and flatness on percussion at the bottom; the tinkling sound, the absence of respiratory sound on the right side, and succussion—physical signs which establish the fact that the patient still has a pyo-pneumo-thorax. The recent withdrawal of a large amount of pus has made the percussion sound much more resonant than it usually is. It is interesting to note that he is pretty well nourished and that he does not look bad. He came in here and walked up three flights of stairs, with only one lung to breathe with. It becomes a very important question what to do with this patient. We have relieved his dyspnœa by aspiration. The danger of pyemic infection from suppurative pleurisy is not very great. As long as he has one lung which does the work of both very well, the question is, what are we going to do with the diseased side to cure it? If we could close up the opening between the pleural cavity and the lung I think we could cure him very readily; because we could then treat the case purely as one of empyema. We would then make an opening into the chest cavity, introduce a drainage-tube, and anticipate that by the gradual expansion of the lung the space would be obliterated to a greater or less extent. But, with an opening from the lung into the pleural cavity, even if we make a permanent external opening and introduce a drainage-tube, the lung will not expand to fill the space and, consequently, we would very likely set up gangrene of the pleura. There would be a constant current of air through from the lung into the pleural cavity, and a splendid chance for infection of all kinds. Moreover, as a matter of clinical experience, such cases do not do well. It is better to aspirate and draw off the pus and relieve the oppression which necessarily accompanies the presence of a large quantity of pus in the pleural cavity; then to improve the general nutrition, and take the chances of the opening into the lung becoming closed. As soon as that opening is closed, the air in the pleural cavity will disappear, and, consequently, the lung will be allowed to expand, which it cannot do now because the pressure is just as great on the lung in the pleural cavity as it is on the external surface. I should hesitate very much to make in this case a permanent opening, especially since the patient has improved so much since the aspiration. I should prefer to aspirate repeatedly, if that is necessary to keep down the accumulation of pus, and hope that the opening into the lung will become closed. A hospital is not the best place for this patient. Out-of-door life is best.

Aneurism within the Pericardium.

Here is a man in whose case no diagnosis has been made. His previous history is one of shortness of breath. He was affected suddenly with vertigo after lifting a heavy weight, and he fell and cut his head. He was taken to the Hospital, where his head was dressed. Then his heart was examined; something interesting was found, and he was kept in the Hospital for two or three weeks. He was treated, probably, for pericarditis, for he has a pericardial friction sound. He was given strophanthus and digitalis for the first twenty-four hours; and he became worse. Then he was given citrate of caffeine, which did not seem to have much effect; but he grew better and his vertigo was relieved.

My impression is that he has an aneurism inside the pericardium. On percussion, the area of cardiac dulness is found to extend up as far as the second rib. The friction sound is very distinct when he stands up or is placed in the sitting posture; but, after he has lain down for a few moments, it disappears, and there is an indistinct murmur just at the base of the heart. The murmur does not seem to be conveyed in any direction. He has had syphilis which, of course, would predispose him to arterial disease. His condition has been the same for two or three weeks, during which time he has been under observation. His eyesight has been interfered with more or less. The breathing has no bronchial character to indicate pressure from an aneurism. But, if an aneurism were given off just inside the pericardium, there would not necessarily be any definite physical signs. If you get a harsh murmur with a pericardial friction sound at that point, I think you might suspect an intra-pericardial

aneurism, which is not generally recognized during life. It is a cause of sudden death in a great many instances. At the *post-mortem*, you will find in such cases, the pericardium filled with blood from the rupture of a small aneurism about the size of a hen's egg, or half that size, and given off just at the origin of the aorta. In one case I made just such a suggestive diagnosis as I do in this case, and it proved to be correct. But there is the danger that comes with increased experience, namely, of overlooking simple things and looking for rare things.

PERISCOPE.

Antirabic Inoculations an Unscientific Method in the Prevention of Hydrophobia.

Dr. Joseph Drzewiecki, of the Holy Ghost Hospital, Warsaw, Poland, in a communication to the New York *Medical Record*, June 15, 1889, takes positive ground against the method of Pasteur in the treatment of rabies. He says that the question as to the efficacy of Pasteur's method of prevention of hydrophobia has been subjected to considerable criticism, and from time to time voices of scientific men have been heard in opposition, the greatest objections coming from Frisch, Ullman, and Peter.

From Pasteur's whole defence the most characteristic argument is addressed to Professor Peter, *i. e.*, that he cannot dispute with incompetent persons, as Peter had never made experiments. The *France Médicale*, July 7, 1888, noticing this fact, remarked that with similar arguments it was difficult to convince anybody, and that now we live in a strange time when the chemist —the experimentor and not the physician— categorically accuses the professor and clinician as incompetent in justifying the therapeutic methods. The only argument which Pasteur always states in favor of his method is the statistics of inoculations. However, it cannot be considered as scientific, and therefore it cannot be seriously treated.

The editor of the *Journal de Médecine de Paris* showed upon what a weak basis Pasteur supported his statistics, and if they were seriously treated we should receive a greater percentage of mortality. The English Commission had personally inquired into 90 cases treated by M. Pasteur, but only 24 of these were said to have been bitten by undoubtedly rabid dogs, so that the 8 fatal in this number were far in excess of the usual proportion of fatalities in cases of bites of rabid dogs, viz.: five per cent. The report had reckoned that of the 2,682 cases treated at the Pasteur Institute the mortality should have been 130 instead of 40; but it ought to have been stated that only 233 of the cases were found to have been bitten by rabid animals, which would have given a mortality of only 15 if untreated. M. Lutaud contended that the Pasteurian method had increased the mortality instead of diminishing it. Before its adoption the annual average mortality in France was 30. The actual mortality in France during 1886 was 42, of which 25 had been treated by Pasteur.

As Pasteur defends his method by statistics, let us cite other statistics. Dr. Kishensky cites cases, selected from the archives of the Katharine Hospital in Moscow. The whole number of cases amounted to 693, and from this number, excluding persons bitten by other animals, 591 were bitten by mad dogs, and there died only 8, or 1.35 per cent. But the author asserts that in this manner statistics cannot be treated, because about many of the persons it was not known whether they had been bitten by rabid dogs, and therefore he omits all such cases and gives only those about which there was no doubt of their having been bitten by unquestionably rabid dogs. Some of them remained in the hospital under medical observation during at least six weeks, but the greater part of them three months and longer.

According to these statistics, it is shown that out of 307 persons bitten by unquestionably rabid dogs, 18 were bitten in the head; 90, in the hands; 25, in the feet; 170, in places covered with clothes; and 4, in places not indicated. Of 18 bitten in the head, 4 died, or 22.2 per cent.; of 90 bitten in the hands, 2 died, or 2.2 per cent.; of 25 bitten in the feet, none died, and of 170 bitten through the clothes, only 1 died, or 0.59 per cent. If we add to the deaths another, belonging to the 4 about whom it is not known where they were bitten, we have 8 deaths, or 2.6 per cent.

Out of 24 persons severely bitten by rabid wolves, 2 arrived at the hospital with the symptoms of hydrophobia; 5 were in the hospital only during six weeks, 4 of them were discharged in good health, and 1, very severely bitten, died of septicæmia. The remaining 17 cases were under observa-

tion during eight weeks. Of this number 11 were bitten in the head, 3 in the hands, and 3 in places not indicated; 5 of them died, showing a mortality of thirty per cent.; but, according to Pasteur, it is eighty-two per cent. All those who died had extensive wounds on the head. The author concludes that a greater number of persons died from the bite of wolves than from that of dogs, because the wounds of the former are larger and more numerous. Of 18 cases bitten by rabid cats, only 3 died. Of 17 cases bitten by rabid horses, 9 were in the hospital during three months, and none of them died of hydrophobia, but 1 died of erysipelas and another of septicæmia. Of 4 bitten by a rabid hog, none fell ill. To this number we must add 4 cases bitten by rabid men, 1 by a white bear, and 1 by a rabid squirrel. Thus of the whole number bitten by rabid animals—396—there died 18, or 4.52 per cent.

If we now consider that in Pasteur's statistics are included many cases improved, and if to this we add the cases given by Professor Peter—of which one died, as Peter asserts, in consequence of the antirabic intensive inoculations, and another died from rabies two years and three months after the antirabic treatment—we arrive at the conviction that the Pasteurian method has no value. *La France Médicale* and *L' Union Médicale* (January 6, 1887) published a letter of Dr. Ziegel, in which he writes that ten soldiers bitten by a dog, suspected of being mad, were sent for treatment to Pasteur. After their return to Wilna, they found the dog that had bitten them in a perfect state of health, and five months afterward the soldiers and the dog were quite well.

Pasteur himself, knowing well the insufficiency of the inoculations, found it advisable to make a certain precautionary statement, namely, that his method cures only the cases in which the bite is not deep and not on the head. What is the good of such a precaution? Is it not evident that the inoculations help at the time when the virus has not entered into the blood, and are inefficacious if the virus has been introduced?

I cannot understand why Pasteur's method is unsuccessful in cases in which bites by rabid animals are large and deep, especially in the face. If the virus acts through the nerves, the least scratch must allow the contact of the virus with the nerves, in which the skin abounds; at last the circulation permits the virus to come in contact with all tissues. Every new method deserves our attention as long as it shows itself efficacious in serious cases which cannot be cured by other methods. Meanwhile, the Pasteurian method includes only slight and doubtful cases, and excludes the serious; in one word, it cures those cases which probably would recover without any inoculations.

Finally, Pasteur asserts that the inoculations weaken the virus introduced by the bite of a rabid animal, *i. e.*, accustom the organism to the virus, no matter whether the unfortunate persons treated by him have or not very violent symptoms of rabies. If the inoculations harden the organism against the virus, then the symptoms of rabies should be very mild, as it is evident in small-pox. In what way, I ask, does Pasteur see the preventive properties of the inoculations? His method neither prevents rabies, nor does it weaken its symptoms.

Patient and Sick-Room in Surgical Cases.

At the meeting of the Ontario Medical Association, June 5, Dr. W. T. Aikins read a paper on the general management of the patient and sick-room in surgical cases. He emphasized the importance of attention to details that are apt to escape the observation of the surgeon who is not painstaking and methodical in his arrangements. A great deal of attention is paid by sanitarians to the disposal of feces and the closing of wells in thickly populated parts, while the exhalations from the kidneys, skin and lungs are comparatively neglected, though they are certainly not less important. In directing attention to the ventilation of the sick-room, he alluded to the fact that about 2,500 people die annually in Ontario of consumption, and thought that this number might be reduced by at least 1,000 by proper adjustment of ventilatory apparatus in schools and in sleeping-rooms, where at least one-third of our existence is spent. Dr. Aikins believes that a culpable disregard of these precautions has been the means of reducing the physical development and bodily vigor of the present generation of Canadians far below that of their ancestors who came from the old countries. If ventilation has such a baneful influence on those in health, how much more serious are its effects upon those who have undergone the shock of a severe operation,

who are the subjects of exhausting discharges, or who have been debilitated by suffering. Hence the surgeon should not consider the appointments of the room unworthy of his notice. If possible to avoid it, the patient should never be required to inhale air which has previously passed through the lungs either of himself or of his attendants. Air which has been heated in the lungs of the patient ascends; therefore an escape for it near the top of the room should be provided.

In winter, open the window above to the extent of two or three inches, and also raise the lower sash according to the requirements of the room. The door should be shut. The air which enters through the lower openings should be filtered through a couple of layers of mosquito-netting, with a thin layer of cotton batting between them. This netting is tacked to a skeleton sash, which fits the lower opening in the window. The air thus filtered, not only of dust, but of many invisible germs, is directed towards the floor, so that it becomes warmed before it reaches the patient, and never creates a draught.

In summer, the windows are opened wider, and larger filters are used. If there is a stove-pipe opening into the chimney, the stopper is removed, and a lamp, to be kept burning constantly, is placed on a shelf a few inches below this opening. A constant current of the impure air of the upper strata of the apartment is thus caused to escape by way of the chimney.

The plans proposed by the speaker were adapted to the homes of the middle and poorer classes, among whom a large proportion of our patients is found.

The attention of the surgeon was also directed to the teeth of his patients. It is well to make it a routine practice to examine the teeth as well as the tongue, and where the grinders are absent to insist upon the wearing of a plate. In persons predisposed to cancer the habitual ingestion of imperfectly masticated hard food may irritate the stomach to such an extent as to cause a development of the disease.

The discussion was continued by Dr. Ruttan, of Napanee, who had long used a filter similar to that described by Dr. Aikins, but made of wire and filled in with oakum, to which any antiseptic that was thought necessary could be added. He generally trusted to the grate or stove to take out the impure air.

The room in which an operation is to take place should be prepared the day before, by having the wood-work and walls thoroughly scrubbed with a bichloride solution, and placing the sash with the antiseptic filter in the window, at least twelve hours before the operation.

Dr. William Britton, of Toronto, recommended that the patient's surroundings be as cheerful as possible. He related an interesting reminiscence of his own experience, when suffering from mumps in boyhood, to illustrate the evil effects of sombre surroundings and tearful friends.

He thought there was too great a tendency even in late days to restrict too narrowly the diet of invalids, though the days of water-gruel and other similar aliments (?) were happily past. The mortality in lying-in cases is certainly increased by too great restriction of diet, as is also the liability to milk-leg, septicæmia, erysipelas, etc. He quoted from Sir James Simpson some very convincing statistics, showing the intimate dependence of the mortality after amputations upon the facilities for the supply of fresh air. Hence he advocated the use of small wards in hospitals in preference to large ones, and of the cottage system as being the best way of giving patients an adequate supply of fresh air.

Dr. Skene, of Brooklyn, N. Y., considers foul air as infinitely worse than foul water. We must breathe air, but we need not necessarily drink water. In abdominal surgery he always tries to keep the air of the operating room as pure as possible by limiting the number of the spectators. Many surgeons make elaborate preparations in regard to the instruments, room, bedding, etc., and then allow the air to be contaminated during the operation by the exhalations of numerous onlookers. The method of filtering the air, as advocated by Dr. Aikins, has been in use for many years in the Children's Hospital in Albany, and with good results. The principle is also carried out in many of the best constituted Houses of Parliament in the world.

Dr. Oldright, Toronto, insisted that the air admitted to the patient should be of a suitable temperature, and in order to that end, recommended that the stove be placed between the patient and the window, and as near the latter as possible. He considered the Smead-Dowd System, by which the foul air is drawn off from the bottom of the room, the best.—*Canadian Practitioner*, June 17, 1889.

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MEDICAL INSPECTION OF SCHOOLS.

The medical inspection of schools is a subject which deserves more, and more methodical, attention in this country than it generally receives. In a way, most of the public, or free schools in the United States, are subject to the supervision of the health authorities; but few of them, we believe, have—as they ought to have—a regular medical inspector, acting in harmony with the teaching and governing corps, to secure the best possible sanitary conditions of the buildings and grounds, and the most healthy condition of the scholars.

In Germany the subject has of late received considerable attention, and Dr. von Gossler, the Prussian Minister of Education, has recently had laid before him certain proposals, the chief points of which are that the buildings and grounds around each school shall be periodically inspected by a school physician, who shall answer a printed list of questions in writing, and send it to the authority under which the school is placed. In order to ascertain the state of the pupils' health, each school is to be inspected by a physician soon after the beginning of each school year. Each child entering the school for the first time is to be examined, and any defects that he or she may have are to be ascertained. In order to secure the success of the medical examination and suggestions, the superintending authority is to inform the physician of what has already been done as regards the sanitary inspection, and the head master or head mistress as regards the examination of scholars.

Some of the details of these proposals we have not quoted, because they are peculiar to the conditions of government found in Germany. In the main, however, they might serve as a convenient outline for some plan, applicable in this country to the important matter under consideration.

We believe it would be of the greatest value to the rising generation if all schools and scholars—public and private—were submitted to careful inspection at relatively short intervals. The fitness of schools for scholars, and of scholars for schools, ought not to be left to the judgment of boards of directors or teachers alone, without medical counsel. Each school should have its medical inspector, to examine every part of the buildings and grounds—the rooms, the closets, the cellars—and the scholars individually and collectively. The systematic conduct of such examinations would, doubtless, do much to prevent the outbreak or spread of disease among the scholars, and, at times, discover cases in which the physical and mental development of individual scholars was being injured by methods of exercise or study which for most was only beneficial.

This subject is one worthy of the careful thought of physicians, who know how much room there is for improvement in the con-

struction and regulation of schools, and who are in a position to advise educators in regard to a very important part of their very important work.

QUARANTINE.

At various times during the past two years the REPORTER has had occasion to refer to quarantine in connection with the subject of yellow fever, and has always expressed the opinion that it is a measure of doubtful value at best, and at worst one capable of doing great harm. This view is not peculiar to this Journal, but is held by many of the oldest students of public health and of epidemic diseases.

A recent pamphlet on yellow fever, by Dr. Le Hardy, of Savannah—to whose writings we have before alluded—calls attention anew to this matter, and demonstrates how futile have been the attempts made in this country to keep out yellow fever by quarantine. More than this, taken in connection with occurrences which have not yet had time to fade from the professional mind, it indicates that property and human lives have more than once been sacrificed to the notion that quarantine is a useful measure of protection against the invasion or spread of epidemics of diseases like yellow fever and cholera.

The futility of this measure has very recently been pointed out again in a report of the Quarantine Committee, appointed by the Royal College of Physicians, of England, April 17, 1889, to consider an inquiry on the subject of quarantine received from the Colonial Office. The members of the committee were Dr. Graham Balfour, Sir Joseph Fayrer, Dr. Cayley, and Dr. Seaton.

After fully considering the question submitted to the College by the Secretary of State for the Colonies as to the proper periods of detention for purposes of quarantine in yellow fever, cholera, and small-pox, and that contained in a despatch from the Governor of Barbadoes as to the incubation periods of those diseases, the Committee reported to the College that the incubation period of yellow fever and cholera is uncertain, and the Committee is of opinion that it is unwise to impose quarantine restrictions in the case of these diseases. The Committee is further strongly opposed to such restrictions generally, which it considers harmful and vexatious. In the case of small-pox, the Committee is of opinion that the incubation period of the disease does not usually exceed a fortnight, and that suitable precautions based on this knowledge are desirable.

These conclusions are of high authority, and deserve the careful consideration of all sanitarians.

A NEW ELIXIR OF LIFE.

Twice in the month of June, 1889, has Dr. Brown-Séquard made communications of a most extraordinary nature to the Société de Biologie of Paris. The statements he made, as the *British Medical Journal*, June 22, says, recall the wild imaginings of mediæval philosophers in search of an *elixir vitæ*. He obtained by compression and washing from the testicles of young animals a fluid which he injected into the subcutaneous cellular tissue with a hypodermic syringe. He performed the experiment on himself, repeating the injection almost every day for a fortnight, with results which appeared to him to warrant an immediate communication to the Society. He stated that he had experienced a rejuvenescence of all his forces, physical and psychic; all that had become difficult or impossible for him owing to advancing age became once more easy, and he found himself possessed of the same vigor as he had had thirty years before. He could undergo fatigue in standing, traveling, and in intellectual labor previously impossible; the functions of defecation and micturition also were discharged with greater ease. MM. Féré and Dumontpallier, in commenting on M. Brown-Séquard's statements, observed that they would have to be rigidly tested and

fully confirmed by other self-experimenters before they were likely to meet with general acceptance.

This communication will strike all thinking men as it does the contemporary from which the above is quoted. The reserve of Dr. Brown-Séquard's colleagues are very politely and temperately expressed; but his statements are so remarkable that it is hard to see how they could be so patiently passed by.

And yet a community which could accept the style of argument adopted by Pasteur in regard to his antirabic inoculations is hardly the one to refuse a hearing to even so strange a proposition as the one of Brown-Séquard.

INTRA-UTERINE COMPRESSION OF THE AORTA IN POST-PARTUM HEMORRHAGE.

Among the measures suggested for controlling post-partum hemorrhage is a very striking one proposed by Dr. Hoyos, a Cuban physician, in the *Revista de Ciencias Medicas*, and quoted in the *Lancet*, June 22, 1889.

Dr. Hoyos was called to a case of alarming post-partum hemorrhage, in which, finding the patient *in extremis*, with the hemorrhage still continuing, and having nothing in the way of appliances with him, except a hypodermic syringe and some ergotine, he first proceeded to clear away the clots from the uterus. While his hand was in the cavity of the womb he was struck with the distinctness with which he felt the pulsations of the abdominal aorta, and determined to try, as a temporary measure at all events, to stop the bleeding by means of pressure, a method which he knew had been recommended and practised by Dr. Sejournet and other obstetricians. In order to effect this, he simply turned his hand so that he could feel the pulsating vessel between the ends of the fingers and the vertebral column. He then exerted firm pressure, and immediately the gush of blood, which, up to that time had been welling up round his hand, stopped. Keeping his right hand in the uterus, he contrived, with some little difficulty, to administer a hypodermic injection or two of ergotine with his left hand. After a few minutes he withdrew his hand; the midwife who was in attendance, keeping up the pressure externally. When the instruments, for which he had sent a messenger, arrived, he administered an intra-uterine injection of corrosive sublimate in a solution containing ten per cent. of spirit. Brandy was also given, and more ergot, both in the form of ergotine and in powder. The patient soon revived; and, though the hemorrhage showed a disposition to return a few hours later, it was controlled by means of intra-uterine irrigation and hypodermic injections of ergotine.

From the history of this case there can be little doubt that the intra-uterine compression of the aorta was of great service, and probably saved the life of the patient. It is not to be supposed, however, that this measure is necessary or applicable in all cases of post-partum hemorrhage, although it is a good one to know about, as, under circumstances similar to those of Dr. Hoyos's case prompt and decisive action is indispensable. At the same time, most obstetricians will probably think that the aorta can be compressed readily enough through the relaxed abdominal wall, immediately after delivery, and that this manner of doing it would be preferable, as a rule, to the more troublesome way of using the hand in the uterus for the purpose.

MEDICAL DUPES IN FRANCE.

Physicians in this country, who know the way in which attempts are sometimes made to entrap medical men into unforeseen responsibilities and liabilities, will be interested to find that such schemes are not the peculiar development of American sharpness. A medical journal of Paris has recently been defendant in a libel suit, brought by an in-

surance company whose methods it had exposed and denounced. The company had been in the habit of sending agents to medical practitioners, offering them the post of "medical inspector" for the districts in which they resided. These appointments were usually accepted. A few days afterwards the agent would return, bringing a paper to be signed by the newly appointed medical inspector, who was assured that it was "merely a matter of form." Usually nothing further was heard of the society, as there was nothing to inspect, until a considerable time had elapsed. The medical inspector then received a formal demand for an entrance fee and the first of a series of annual premiums, for which he had unintentionally made himself liable. The medical journal alluded to made inquiries in regard to the methods of the insurance company, and discovered that nearly all the practitioners in certain districts had been honored with appointments as medical inspectors. In one instance two gentlemen residing in the same house had accepted the post.

The Court held that the medical journal had not overstepped its rights, and gave judgment in its favor.

This is a case of interest to medical journalists, and to physicians in general. To the former, it is comfortably in keeping with a recent English decision, by which an author, whose book had been severely condemned in a critical review, was awarded one farthing damages. To the latter, it is interesting, as a warning against the blandishments of persons who attempt to play upon their credulity by means of offers of position or gain.

—Dr. G. A. Gibson states in the *Edinburgh Med. Journal*, June, 1889, that, so far as his knowledge goes, Cheyne-Stokes respiration has not been observed as a consequence of the action of strychnine by any of the authors who have devoted attention to the subject.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

A PRACTICAL TREATISE ON NERVOUS EXHAUSTION (NEURASTHENIA), ETC. By GEORGE M. BEARD, A.M., M.D., etc., edited, with notes and additions, by A. D. ROCKWELL, A.M., M.D., etc. 8vo, pp. 254. New York: E. B. Treat, 1889. Price, $2.25.

This is one of those poorly prepared books, of which the publisher has produced so many during the past few years that there is reason to fear the taste of the profession in this country is utterly depraved. Dr. Beard's book was first published in 1880, and then was a rather curious exposition of his views in regard to what he called neurasthenia. These views were of a rather extravagant character. But they were not without value, even if they were better calculated to prompt others to investigate certain curious mental and nervous phenomena than proofs of wise discrimination on the part of the author. At this date, however, the book is so much behind the scientific position of neurologists that its value is chiefly historical. The so-called additions and editing of Dr. Rockwell which are found in the volume before us are of so little worth and of such insignificant proportions that it is almost a fraud to attempt to pass the book off as a new edition. It is little more than a poor reprint, and would be very dear at the price asked for it.

CORRESPONDENCE.

Mumps and Double Orchitis.

TO THE EDITOR.

Sir: Under the above heading I note a paragraph on page 712, volume lx of the REPORTER. Mumps and orchitis, as a complication, is not of uncommon occurrence in this section. I have on my minutes the following:

Case 1.—J., white, age 35; mumps right side; fifth day orchitis of right testicle. On subsidence the testicle was absorbed, leaving only the cord and a small ball one-half inch in diameter both ways. Had no children after this accident.

Case 2.—W. B., age 8; mumps right side; sixth day, orchitis of right testicle. On subsidence the testicle was not much reduced in size, but felt like a small bladder of fluid; no solid substance in it. Married since then, and has three boys.

Case 3.—B. W., age 15; mumps, left side; sixth day orchitis—both testicles involved. On subsidence they were normal, as to size and consistency; in fact unaltered. Married since, and has five children.

Case 4.—B. H. B., age 13; mumps, right side; orchitis, right testicle. On subsidence no change perceptible as com-

pared with the left one. Married since, and has four children.

Case 5.—Miss L. H., age 14; mumps, left side; swelling of both breasts, with fever, also some pain and swelling in vulva, and in the ovaries. Married at 19, and has three children.

Case 6.—Mrs. M. H., age 31; mumps. Same symptoms as Case 5, but more ovarian pain, and vulva much swollen and very painful. Has five children.

Cases 7–9.—Three boys, aged 12, 11, and 13 years, respectively, with much the same symptoms as in Case 3. No bad results following.

In the last six cases I attended, I used strong camphor water, hot as could be borne, to the parts, also saline purgatives in small quantities.

It looks strange to me that, with so much swelling in the glands, there should, with a little care, be so little after-trouble.

The cases described above were noted in 20 years of practice.

Yours truly,

BEN. H. BRODNAX, M.D.

Brodnax, La.,
June 21, 1889.

NOTES AND COMMENTS.

Water-Supply of Paris.

The Paris correspondent of the *Lancet*, writing in the issue for June 22, says that

A great danger to visitors to Paris is due to the insufficiency of the water-supply. Paris is in a most unfortunate position. It cannot be said that the water-supply is bad. On the contrary, at immense cost, Paris has secured one of the best water-supplies enjoyed in any town of Europe. According to the last report, Paris was receiving 121,000 cubic metres of the Vannes water, 21,000 cubic metres derived from the Dhuis, and 5,000 cubic metres from the St. Maur springs—in all, 147,000 cubic metres of pure and excellent spring water. This, however, is not enough. The daily consumption is estimated at 158,000 cubic metres. The deficiency is not very great; still it is enough to compromise the whole town; for when the store of good water is exhausted the Seine water is provided, and this through the same channels and without warning. Thus, though a person may, as a rule, drink wholesome water, he will receive for a week or so during the course of the year water taken from the Seine, which is very likely to be contaminated. Again, a person may drink a glass of water in one quarter of Paris which is perfectly pure, while in another district he may, on the same day, get water that is certainly not free from the occasional presence of injurious organic matter. At the present moment, the supply of spring water having reached a low ebb, the Seine water is turned on in four arrondissements. For twenty days these unfortunate districts are to receive only the Seine water; then three other arrondissements are to be served in the same way.

In the pavilion of the Prefecture of the Seine, situated in the central court or garden of the Exhibition, will be seen three glass tanks of water side by side. One receives the water of the Ourcq canal, another of the Seine, and the third of the Vannes. The first two are more or less opaque, are of a green-yellowish tint, and vary more or less in aspect from day to day. But that which contains the water of the Vannes is always perfectly transparent and never changes. Members of the Municipal Council have urged, so far in vain, that the water-supply should be increased. There are numerous projects, and recently a resolution was passed by the Council calling upon the Legislative Chambers to discuss at once the scheme for bringing the waters of the Avre to Paris.

That the Seine water may be dangerous will be obvious to all who are acquainted with the neighborhood of Paris. The intake for the supply is of course outside the town, and some little distance up the stream, but it is unpleasantly near the large manufactories of *poudrette*, or human guano. Also there are boats containing tanks which are filled with the contents of cesspools, and the manure is thus conveyed up the river to the works. A few years ago some scavengers, in their impatience to finish their day's toil, instead of conveying all the soil the barges contained to the works, simply threw a considerable portion over into the river. Fortunately this was discovered, and now there is a service of inspection organized both day and night, and careful watch is kept that these tank barges should not again contaminate the water. But there are other causes of pollution, and it is an undeniable fact that many outbreaks of typhoid fever in Paris have occurred about a fortnight after the substitution of Seine water for the usual and pure supply of water from the Vannes

or the Dhuis. The question of water-supply is a very serious problem which the French authorities should lose no time in settling.—*Lancet*, June 22, 1889.

Medical Relief for Seamen.

Among the contracts and arrangements made by the Marine Hospital Service for the care of sick and disabled seamen during the year beginning July 1, are the following:

For Philadelphia. Medical attendance to be furnished by a medical officer of the Marine Hospital Service; the German Hospital to furnish quarters, subsistence, nursing, medicines, and a resident physician, at 75 cents per day, and to provide for the burial of deceased white patients, at $10 each; colored patients, at $15 each. Transportation from the Marine Hospital office to the hospital to be furnished by the hospital authorities when required. Care and treatment of contagious cases to be furnished by the Philadelphia Board of Health, at $1 per day, and to provide for the burial of such deceased patients, at $5 each.

For Pittsburgh. Medical attendance to be furnished by a medical officer of the Marine Hospital Service; out-patients to be treated at No. 96 Wood street; the Mercy Hospital to furnish quarters, subsistence, nursing, and medicines at 94 cents per day; J. J. Giltinan to provide for the burial of deceased patients at $13 each. Care and treatment of small-pox, yellow fever or cholera patients to be furnished by the Pittsburgh Board of Health at $2 per day.

For Erie. Medical attendance to be furnished by an acting assistant surgeon; Hamot Hospital Association to furnish quarters, subsistence, and nursing, at 71 cents per day. Patients requiring long-continued hospital treatment will be furnished transportation to the United States Marine Hospital at Detroit, Mich.

For Wilmington, Del. Willard Springer, M. D., to furnish quarters, subsistence, nursing, medical attendance, and medicine at $1 per day.

For Tuckerton, N. J. Medical attendance to be furnished by an acting assistant surgeon; Mary A. Gifford to furnish quarters, subsistence, and nursing at $1 per day.

For Crisfield, Md. Medical attendance to be furnished by an acting assistant surgeon; Stewart Handy to furnish quarters, subsistence, and nursing at 55 cents per day. Patients requiring long-continued hospital treatment will be furnished transportation to Baltimore, Md.

Creasote Emulsion.

Dr. Charles Éloy gives the following formula in the *Gazette Hebdomadaire*, May 10, 1889:

Oil of sweet almonds	℥v
Beechwood creasote	℥ii
Mix, and add:	
Gum arabic	℥iii ℥v
Mint water	℥xvi

M. Give from two to five soup-spoonfuls a day.

Antiseptic Mouth Wash.

Galippe and Malasez give, in *Nouveaux Remedes* No. 55, the following formula for an antiseptic mouth wash which has been found satisfactory by them:

Alcohol	parts 370
Carbolic acid	" 10
Thymol	" 5
Oil of peppermint	" 15
Tincture of anise	" 100

This mixture, which may be colored with some tincture of cochineal, should be employed morning and evening, and the mouth rinsed out at the same time with a weak solution of boric acid.

Diagnosis of Cervico-brachial Neuralgia.

Dr. Daniel R. Brower, speaks as follows of the differential diagnosis of cervico-brachial neuralgia, in a communication to the *Western Med. Reporter*, May, 1889:

Cervico-brachial neuralgia requires special care in its diagnosis, since the arm may be the seat of other painful affections, such as muscular and articular rheumatism, diseases of the bone, etc. Differentiation here is aided by the *puncta dolorosa*. These are the axillary, corresponding to the brachial plexus; the scapular, near the inferior angle of the scapula; the acromial, in the angle between this process and the clavicle; the median cephalic, in the bend of the elbow; the ulnar, corresponding to the most superficial portion of the ulnar nerve at the back of the elbow joint; and the radial, at the point where the radial nerve becomes super-

ficial. These *puncta dolorosa* are absent in the affections for which the neuralgia may be mistaken.

Menthol in Hay Fever.

In a letter to the *Lancet*, June 22, Mr. William Hill of London says: "Dr. De Havilland Hall, in his summary of the treatment now generally adopted in hay fever, has deprecated the continued use of cocaine. It has happened in my practice, and probably in that of others, that one has been called upon to advise and treat a patient who had already acquired the cocaine habit in seeking relief from coryza vasomotoria, and the question naturally has arisen, Cannot the patient be induced to give up cocaine on our promising him an efficient and unobjectionable substitute? I think we possess in menthol an antiseptic remedy sufficiently resembling cocaine in its anæsthetic and astringent properties, and having none of its disadvantages. A Cornish patient of mine, who has been prevented coming for a reapplication of the galvanocautery, which has hitherto relieved only for a season, has recently written to me to say that he would not be without menthol for worlds, and that he much prefers it to cocaine. I have no doubt others have had similar successes with a 10 or 20 per cent. of menthol, dissolved in almond or olive oil, and applied to the sensitive area of the nasal mucosa either by means of a brush or coarse spray."

The American Surgical Association.

The annual meeting of the American Surgical Association was held in the new Army Medical Museum at Washington, on May 14 and two following days. The President, Dr. D. W. Cheever, of Boston, gave a very cheering address, in which he took a most optimistic view of the future of surgery. The view has too often been taken that surgery has nearly reached finality. Fifteen years or more ago we recollect a very eminent London surgeon, in an address at the opening of a winter session, taking this for his text, yet at that time antiseptics were only beginning to come into general use, abdominal section was only performed by a few specialists, the thorax was seldom explored, and few yet dreamt that tumors and other diseases of the brain were susceptible of treatment by the knife. Surgery has now outstripped anatomy and physiology, and Dr. Cheever was fully justified in saying that what we now want is, not greater boldness in surgeons, but more accurate and practical anatomy and more precise physiology. He specially indicated the anatomy of the fasciæ and the relations of the abdominal viscera, and the physiology of the intestines and pancreas, and of the spleen and other ductless glands. Among the papers read, perhaps the most striking, were one by Dr. L. McLane Tiffany, of Baltimore, recommending free division of the capsule of the kidney for intractable nephralgia, and an elaborate paper by Dr. J. M. Barton, of Philadelphia, on digital divulsion of the pylorus for cicatricial stenosis (Loreta's operation). The author contributed a successful case in his own practice, and presented a table containing twenty-five cases collected from various sources. These cases showed a mortality of 40 per cent. (ten deaths), but the rate appeared to be decreasing, for, of the first twelve cases, six recovered and six died; while of the following thirteen, nine recovered and four died.—*British Medical Journal*, June 22, 1889.

Reported Death from Hydrophobia.

A man named Jack Snyder is said to have died of hydrophobia on the public highway near Danville, Illinois, July 1. He and his family set out in a covered wagon from Lehigh county, Pa., for Missouri. Shortly afterwards Snyder was bitten by a stray dog. At Danville his condition was so serious that the family came to a halt. They were in destitute circumstances, and the body was buried in the potter's field.

Infantile Convulsions.

Mr. H. Valentine Knaggs, of London, advises the use of sulphide of calcium, in small and repeated doses, as a remedy for infantile convulsions and other nervous diseases. He has observed the best results in convulsions from dentition, falls on the head, meningitis, and acute tuberculosis. For infants under six months of age, Dr. Ringer's prescription is recommended. It is prepared by dissolving a grain of sulphide of calcium in a half a pint of water, of which a teaspoonful is given hourly, the dose being cautiously increased if need be. Dr. Knaggs has found it advantageous to combine this treatment with the administration of antipyrine.

NEWS.

—Professor von Zehender, the well-known ophthalmologist of Rostock, celebrated his seventieth birthday on May 21.

—Dr. S. Weir Mitchell will take his accustomed ocean voyage this summer and, it is said, while in England will visit Sir Morrell Mackenzie.

—A petition has been addressed to the Municipal Council of Paris, praying for the substitution of electricity for the guillotine in the execution of capital sentences.

—The medical board of pension examiners in Dubuque, Ia., now consists of Drs. M. H. Waples, J. S. Lewis, and Geo. A. Staples. The latter was appointed to succeed Dr. M. E. Connelly.

—The semi-annual meeting of the medical society of Fulton County, New York, was held at Gloversville, Tuesday, June 18. "Modern treatment of Wounds" was the subject of a paper read by Dr. F. Drury of Broadalbin. Dr. W. C. Wood read a paper on "Lazy Therapeutics." Miss M. Helen Cullings was admitted to membership.

—The family of Dr. Chas. F. E. Ritter, of New York City, who was found dead in bed, on June 20, discredit the rumor that he committed suicide. The doctor had suffered with heart disease for some time. He attended the dinner at the opening of the Brooklyn Throat Hospital, Wednesday night, and it is thought that the unusual excitement brought on an attack of his ailment. Coroner Lindsay thinks that death was due to natural causes.

—The Philadelphia *Ledger* states that the Indian Government's endeavor to promote the study of medicine by women is said to be proving most successful. At the last examination of students in Calcutta women carried off numerous prizes and honors. A native girl, Rajni Mitter, ranked highest in the first M. B. examination, and carried off two prizes; Misses Sykes, Dissent, and Pereira obtained certificates of honor in surgery; Miss Woods a special certificate of honor in anatomy; Miss Mitchell secured the Viceroy's medal, a certificate of honor in ophthalmic medicine, and numerous prizes; Miss Muller took a gold medal in *materia medica* against all competitors, and a special certificate in anatomy; Miss Smyth won a gold medal in dentistry, and Miss Fox a certificate of honor in anatomy.

HUMOR.

AGENT (to traveller)—"Have you a policy in case of accident?"

Traveller—"Yes, sir. My policy would be to go halves with a smart lawyer and sue the company for $50,000."—*Tid Bits.*

A LADY WHO NEVER FAILED to have her little jest with the doctor all through a painful illness, exclaimed one day when he was announced:

"Tell him I'm sorry, but I don't feel well enough to see him to-day!"

A CONSULTING ROOM ECHO.—"Your wife is in a very critical condition, and I think some specialist should be called in for consultation in the case."

"There now, doctor, I was right again. I told my wife long ago she ought to get proper medical treatment, but she thought you might be offended."

"SAM, how is Tallier getting along now?" "Oh, so. He's putting on too much style now to please me." "How is that?" "Well, he's got a mild attack of dyspepsia and he calls it 'Bright's disease'—tryin' to make it appear as if he is a distinguished person. It makes me sick to see a fellow puttin' on so much style."

THERE IS A MILKMAN at Brixton who has a ready wit that a lawyer might envy. One of his customers caught him watering his milk at a horse-trough the other day. "What!" said the customer, in a rage, "isn't it enough that your milk is full of typhoid without your going and watering it?" The milkman turned round, and, smiling compassionately, said to two or three bystanders: "What can you do with a man like this? He actually wants his typhoid straight."

A MAN READING A NEWSPAPER in a car on the elevated road was observed to chuckle vociferously. Another man sitting alongside of him remarked: "You seem to be very much amused!" "You bet I am amused; I expect to rake in several thousand dollars." "Rich relative dead and left you money?" "Better than that. I have just read that the board of health is going to tear up the streets in my ward and lay new sewer pipes. That means typhoid fever, and I am an undertaker. I tell you, my dear sir, I don't know what we poor undertakers would do for a living if it wasn't for that board of health."—*Drug Circular.*